



UNITED STATES PATENT AND TRADEMARK OFFICE

Handwritten mark: a large '4' with several diagonal lines crossing it.

Applicant: Gerald R. Black

Serial No.: 09/865,638

Filed: May 25, 2001

COPY OF PAPERS
ORIGINALLY FILED

For: PEN-BASED TRANSPONDER IDENTITY VERIFICATION SYSTEM

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

This communication is sent in response to "Notice to File Corrected Application Papers" posted July 25, 2001. Objections were made to the margins on the drawings submitted. Copies of the reduced drawings are enclosed. Also, Applicant is submitting this Preliminary Amendment at this time - as set forth below.

IN THE SPECIFICATION

Kindly amend the specification as shown:

On page 9, delete lines 1 through 4

On page 18, line 9 delete "7A and 7B" and replace it with --9A and 9B--.

On page 18, line 12 delete "7C and 7D" and replace it with --9C and 9D--.

REMARKS

The first four lines on Page 9 are duplicates of the last four lines from Page 8.

Also, inasmuch as there are no FIGURES 7A, 7B, 7C, and 7D (only a FIGURE 7) and since the description of the FIGURES 9A, 9B, 9C, and 9D in the DRAWING DESCRIPTION corresponds to the subject matter shown in FIGURES 9A, 9B, 9C, and 9D, the correction is appropriate. No new matter added by these changes.

Copies of the pages changed (marked and clean) are enclosed.

Respectfully submitted,

November 15, 2001

Gerald R. Black, Esq.
Registration Number 29,514
30590 Southfield Road, Suite 160
Southfield, Michigan 48076
Phone: (248) 644-1014
Fax: (248) 647-0568

[FIGURES 9C and 9D disclose a second preferred embodiment of a stylus for use with the identity authentication system of the present invention, the stylus being unfoldable into a card-shaped device that includes a magnetic stripe that can be read by a conventional card reader, the device being compatible for carrying in the wallet of a customer;]

FIGURE 10A discloses another simplified logic diagram for making a purchase at a POS terminal using the wireless customer identity verification system of FIGURE 5, the method including a check to confirm that the transponder is not a counterfeit or has been tampered with;

FIGURE 10B discloses another simplified logic diagram for making a purchase at a POS terminal using the wireless customer identity verification system of FIGURE 5, the method including a check to confirm that the transponder is not a counterfeit or has been tampered with and also using a different referent reference print based upon the total amount of the transaction; and

FIGURE 11 discloses yet another simplified logic diagram enabling an existing customer using a conventional credit card or transponder to register a reference fingerprint in her customer record during the processing of a conventional POS transaction where the stylus with the fingerprint sensor is used.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, FIGURE 1A discloses generally the identity verification system of the present invention. The system comprises a host computer, an interrogation device, a transponder device, and a stylus. Each system also comprises a host computer, a sensor positioned within a stylus used to generate a writing on a surface, an interrogator, and a wireless identifier (hereinafter referred to as a "transponder").

The preferred embodiment of the identity verification system of the present invention is for use in commercial transactions. The host computer has access to data that links the customer with the customer's payment account. The interrogator is linked to the

FIGURE 10A discloses another simplified logic diagram for making a purchase at a POS terminal using the wireless customer identity verification system of FIGURE 5, the method including a check to confirm that the transponder is not a counterfeit or has been tampered with;

FIGURE 10B discloses another simplified logic diagram for making a purchase at a POS terminal using the wireless customer identity verification system of FIGURE 5, the method including a check to confirm that the transponder is not a counterfeit or has been tampered with and also using a different referent reference print based upon the total amount of the transaction; and

FIGURE 11 discloses yet another simplified logic diagram enabling an existing customer using a conventional credit card or transponder to register a reference fingerprint in her customer record during the processing of a conventional POS transaction where the stylus with the fingerprint sensor is used.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings, FIGURE 1A discloses generally the identity verification system of the present invention. The system comprises a host computer, an interrogation device, a transponder device, and a stylus. Each system also comprises a host computer, a sensor positioned within a stylus used to generate a writing on a surface, an interrogator, and a wireless identifier (hereinafter referred to as a "transponder").

The preferred embodiment of the identity verification system of the present invention is for use in commercial transactions. The host computer has access to data that links the customer with the customer's payment account. The interrogator is linked to the

Registration can also occur without the pen, but rather with a fingerprint that captures essentially a complete fingerprint of the finger for references purposes. Subsequently, when the pen is used, the partial print is compared to the complete fingerprint for matching purposes.

Just as a transponder that is compatible with existing cardreaders enables the system of the present invention to be compatible with card-based systems and pen-based (cardless) systems as shown above, utilization of a pen that is compatible with existing cardreaders offers many similar advantages for a wireless stylus, that is compatible with card-based systems and pen-based systems. FIGURES 9A and 9B [7A and 7B] disclose a first preferred embodiment of a stylus grip for use with the identity authentication system of the present invention, the grip having a rotatable flap that includes a magnetic stripe that can be read by a conventional card reader. FIGURES 9C and 9D [7C and 7D] disclose a second preferred embodiment of a stylus for use with the identity authentication system of the present invention, the stylus being unfoldable into a card-shaped device that includes a magnetic stripe that can be read by a conventional card reader, the device being compatible for carrying in the wallet of a customer.

Employing the pen-based systems of the present invention will be initially implemented in controlled environments, generally where registration occurs on-site using the stylus with the fingerprint sensors - for example, a hotel or resort. The principles of this invention are applicable to controlled environments other than resorts, and hotels. As used herein, unless the context suggests otherwise, a controlled environment is a community of people that: (1) requires registration to become a part of the community; and (2) where the purchase of goods or services occurs. Some examples of controlled environments include: hotels-resorts, luxury cruise liners, airports, banks, racetracks, bowling alleys, theme parks, hospitals, college campuses and public/private schools, military bases, hotel-casinos, sports complexes, shopping malls, and prisons. Once enrolled into the cardless transaction system of the present invention, any guest upon registration with the hotel complex has full and complete access to any amenity within the complex, at anytime, without carrying on his/her user anything other than biometric identification that is inherent in his/her being. As used herein a "controlled environment" does not require a single physical structure, but rather includes a network

Registration can also occur without the pen, but rather with a fingerprint that captures essentially a complete fingerprint of the finger for references purposes. Subsequently, when the pen is used, the partial print is compared to the complete fingerprint for matching purposes.

Just as a transponder that is compatible with existing cardreaders enables the system of the present invention to be compatible with card-based systems and pen-based (cardless) systems as shown above, utilization of a pen that is compatible with existing cardreaders offers many similar advantages for a wireless stylus, that is compatible with card-based systems and pen-based systems. FIGURES 9A and 9B disclose a first preferred embodiment of a stylus grip for use with the identity authentication system of the present invention, the grip having a rotatable flap that includes a magnetic stripe that can be read by a conventional card reader. FIGURES 9C and 9D disclose a second preferred embodiment of a stylus for use with the identity authentication system of the present invention, the stylus being unfoldable into a card-shaped device that includes a magnetic stripe that can be read by a conventional card reader, the device being compatible for carrying in the wallet of a customer.

Employing the pen-based systems of the present invention will be initially implemented in controlled environments, generally where registration occurs on-site using the stylus with the fingerprint sensors - for example, a hotel or resort. The principles of this invention are applicable to controlled environments other than resorts, and hotels. As used herein, unless the context suggests otherwise, a controlled environment is a community of people that: (1) requires registration to become a part of the community; and (2) where the purchase of goods or services occurs. Some examples of controlled environments include: hotels-resorts, luxury cruise liners, airports, banks, racetracks, bowling alleys, theme parks, hospitals, college campuses and public/private schools, military bases, hotel-casinos, sports complexes, shopping malls, and prisons. Once enrolled into the cardless transaction system of the present invention, any guest upon registration with the hotel complex has full and complete access to any amenity within the complex, at anytime, without carrying on his/her user anything other than biometric identification that is inherent in his/her being. As used herein a "controlled environment" does not require a single physical structure, but rather includes a network